NOTES

WASHINGTON NOTES

A NEW STUDY OF INDEX NUMBERS

The United States Bureau of Labor Statistics has published one of the most complete discussions of index numbers that have been prepared in recent years, either officially or through private effort. The work has been done by Professor Wesley C. Mitchell and the aim of the monograph is "to make the index numbers of wholesale prices currently published in the United States and foreign countries more accessible more intelligible, and therefore more useful" (*Bulletin U.S. Department of Labor No. 173*).

The history of index numbers is briefly reviewed and this outline is followed by a somewhat longer analysis of the various difficulties to be met with and overcome in connection with the gathering of prices. On the whole the author reaches the conclusion that in selecting the method to be employed in making an index number, the investigator should be guided by the purpose for which the results are to be used. In the main, currently published index numbers are used for the notation of differences in wholesale price levels, and for that general purpose a weighted aggregate of actual prices is considered best. Professor Mitchell's investigation then turns to the kind of prices which should be selected and a contrast is drawn between market prices, contract prices, and import-export values, detailed attention being paid to different methods of weighting the figures. One of the most interesting features of the inquiry is the analysis of actual index numbers in the United States, seven series being taken as the basis of study. These include the well-known index numbers of Dun, Bradstreet, the *Annalist*, and Gibson.

The general conclusion arrived at is to the effect that of "the index numbers regularly published, Bradstreet's makes much the best showing," but it is argued that each of the seven series has its special uses, its merits, and its defects and that a choice among them should be made in accordance with the particular purpose for which an index number is wanted.

In the second part of the report the index numbers developed by the United States Bureau of Labor and various foreign countries as well as

by other agencies are considered and compared with one another. The concluding pages of the document are devoted to a bibliography of books on the subject.

In closing this review of a very serviceable study it is worth while to note some of the more important general or abstract conclusions arrived at by the author. These are as follows:

1. Variations in the level of wholesale prices from one year to the next are capable of being measured with a close approximation to accuracy, for these variations are highly concentrated about a central tendency.

2. Variations in prices that have been cumulating through several or many years show much less concentration about a central tendency than variations from one year to the next.

3. The more commodities that can be included in such an index number the better, provided that the system of weighting is sound.

4. Probably the best weights to apply are the average physical quantities of the commodities bought and sold over a period of years without reference to the number of times their ownership is changed.

5. In presenting such an index number, it is well to publish the aggregate actual prices, both for the several groups and for the grand totals.

THE NEW RURAL CREDIT PLAN

After a period of deliberation extending over some nine months, the Joint Committee on Rural Credits, created by an act passed at the close of the last session of Congress, March 3, 1914, has rendered its report and submitted a new rural credits bill. The bill in question was introduced in the House of Representatives on January 4 as H.R. 6838, while the formal report of the Commission was submitted on the same date.[1]

The new bill is the last of a long series of rural-credits measures, and analysis of it shows that it is essentially based upon the so-called Hollis-Bulkley bill, drafted during the summer of 1913, by a joint subcommittee representing the committees of the House and Senate on banking and currency. In the original Hollis-Bulkley bill the plan proposed provided for the creation of a group of so-called "land banks," and underlying and supporting them "farm loan associations." These farm loan associations might be organized with capitals as low as $10,000, and were to make advances on first mortgages secured by farm lands; and whenever such farm loan associations presented these mortgages to the land bank

[1] *Congressional Record*, January 4, 1916, pp. 493 ff.

of the district in which they were situated, such land bank was expected to purchase the mortgage in question. The farm loan associations were thus provided with further resources for lending to other borrowers, and were permitted to extend such loans up to an amount equal to twenty times their capital, if desired. The land banks, on the other hand, were expected to obtain their funds by selling to the public bonds protected by the farm mortgages which had been purchased from farm loan associations, the said mortgages being deposited in trust, so that the bonds were thus real estate collateral securities. In order to supply an immediate market for the bonds, it was provided that they might be used as investments for postal savings funds, might be purchased by national banks, and under certain conditions should be taken up by the Treasury to the extent of $50,000,000 per annum. In the present bill the same plan is retained as the basis, but with certain fundamental modifications. Perhaps the most important of these is that the farm loan associations are now to be established without capital, being "associations" in the broadest sense of the term. They are permitted to sell mortgages to the land bank of the district in which they are situated, but, as they lack capital, such a land bank could protect itself in case of default of the mortgage only by falling back upon the general liability of the members of the association. The second important modification is found in the fact that the land banks (whose stock is to be bought by the government if not taken by private subscription) are to be made government depositaries. This would mean that the government might, to any extent that it felt disposed, supply capital for the use of the land banks, although there is a provision that the money thus deposited is not to be invested in mortgage loans. It could, however, apparently be used in the purchase of farm loan bonds, or in covering defaults of interest or principal. The system is placed under the general oversight of an organization to be known as the Farm Loan Board, organized after a manner somewhat similar to that adopted in the creation of the Federal Reserve Board.

In urging the adoption of the measure, the Committee says:

The rapid increase of tenant farmers and the tendency to abandon agriculture and seek the larger centers of population has become a national menace in this country as well as in Europe. It increases the cost of living and causes a one-sided development. Most civilized nations are already offering direct aid and other inducements to persuade the people back to the land. We believe that the United States can well afford the moderate encouragement provided in this bill.

Much has been accomplished in Europe by legislation that encourages co-operation. There are societies to organize co-operative institutions, lecturers who go about to spread the co-operative gospel, and training schools for boys, girls, and adults. There are laws establishing systems of personal rural credits as well as land-mortgage systems. There are co-operative buying, co-operative selling, co-operative creameries, markets, breeding establishments, insurance companies, and the like. These are all important, especially personal credits.

Our country lags far behind Europe in most matters of co-operation among farmers. There are conditions which render it more difficult here than in older countries. But so far as co-operation is applicable, and as speedily as we can adapt it to our own conditions, it should be established.

The framers of this bill realize that it is but one factor in the vast field for national co-operation that lies before the American farmer. But they entertain the hope that organization for the purpose of securing land mortgage credit will bring neighboring farmers into closer touch all over the Union and will stimulate the co-operative spirit. Those men who organize farm-loan associations will become better acquainted and more trustful of each other, so that it will be comparatively easy to form organizations among the land-mortgage groups for personal-credit unions, and various forms of co-operative activity.

It is noteworthy that although the Committee on Rural Credits was directed to consider not only a plan for farm mortgage loans but also a plan for so-called "personal credits," it has accomplished nothing, so far as is known, on the latter subject. There has been a growth of the view that under existing conditions it is difficult to provide for personal loans to farmers in the United States beyond what is now done through the use of existing banking machinery The section of the Joint Committee on Rural Credits to which was assigned the work of preparing a bill relating to personal credits has, at all events, thus far furnished nothing, perhaps with the idea that the subject would be better deferred until the problem of long-term credit has been disposed of. As in the Hollis-Bulkley bill, it is provided in the new measure that the mortgage loans are to be of very long term, thirty-six years being established as the maximum, with provisions for amortization payments annually. Should the new bill be successful in accomplishing its object, it would presumably result in moving the present body of farm mortgages, made on short terms of three to five years for the most part, into the new system, as a result of which the present holders of farm mortgages would find themselves driven to substitute farm loan bonds for their mortgage holdings, or else to find some other form of investment.

OUR INTERNATIONAL BALANCE

The complete figures for the international trade of the United States during the year 1915 show that the excess of exports over imports will probably total about $1,750,000,000, although minor corrections in this figure may be introduced when the final data are made public by the Department of Commerce. The computations published by the Federal Reserve Board show that there has been a gold movement into the United States aggregating about $450,000,000, subject to a deduction in round numbers of about $30,000,000—a net inward movement of $420,000,000. In addition it appears from the figures of the Director of the Mint that there has been a domestic production of gold for the year of about $99,000,000, most of which would ordinarily have been exported but which has during the past year been retained at home. It would thus appear that the United States has made a gain of more than $500,000,000 in gold during the past year as compared with the position it would have occupied under normal circumstances. If it be assumed that the gold losses during the early months of the European war—August–December, 1914, inclusive—amount to about $200,000,000, the net gold gain of the United States as compared with the position it would probably have occupied had the war not occurred may be estimated at $300,000,000. From the standpoint of international trade it is evident that with a net importation of about $420,000,000 during the year, an unliquidated balance of the difference between $1,750,000,000 and $420,000,000, or about $1,330,000,000, is still to be accounted for. After making allowance for the freights paid to foreign ship owners, and for the very minor sums this year spent in tourist travel abroad, it is clear that there still remains an enormous sum whose liquidation has been provided for otherwise. This has been done (1) by the importation and sale of American securities held abroad, and (2) by the placing here of foreign bonds and securities. In addition to the $500,000,000 Anglo-French loan, other credits granted to foreigners are estimated by different persons of more or less authority at from $300,000,000 to $500,000,000. If the lower of these figures be taken as correct, the amount of indebtedness probably paid for by the sale of American securities here would still be over $500,000,000. As a matter of fact, reliable banking authorities express the opinion that the total of American securities shipped to the United States for sale has thus far been in the neighborhood of $1,500,000,000. If this estimate be sound, the figures already cited make it plain that Europe has accumulated a large credit balance in the United States upon

which she is drawing for her current supplies, and may for some time continue to draw. This credit balance, on the basis of the figures just given, might run as high as $1,000,000,000, that amount consisting in part of the proceeds of the sale of foreign loans here, and in part of the proceeds of the sale of American securities formerly owned abroad, in the United States. These figures give a somewhat different idea of the international balance from that which is ordinarily entertained, as many persons are under the impression that Europe is still heavily indebted to this country. The latter view is supported by the fact of serious depression in foreign exchange, implying a continuance of the difficulty of providing means of payment which has been characteristic throughout the war. The fact probably is that the difficulty of providing means of payment and the depression of foreign exchange corresponding to it are due to the artificial interference with gold movements abroad, and to actual depreciation of foreign currencies, even where parity with gold is nominally maintained. Quite probably the estimate just given of the trade balance which Europe has created here may be considerably larger than the facts will ultimately warrant, but, assuming that the figures are approximately true, it would seem as if means of payment for immediate requirements had been quite fully provided. If the trade balance for the coming year were to be as large as last year, viz., $1,750,-000, considerably more than half of it might be regarded as already provided for. As it is estimated in responsible quarters that probably $500,000,000 more of foreign-held American securities can be obtained and shipped to this country, these, together with the current or banking credits already existing and those reasonably to be obtained in addition, would finance the export trade of the United States for another twelve months. All of the figures thus relied upon, except those relating to actual merchandise movements, are naturally subject to revision and correction; but the data now available indicate that they represent the basic facts of the situation. One of the most important economic studies to be undertaken as soon as the return of peace permits the publication of reliable statistics will be a thorough analysis of the international trade balances and indebtednesses of the world. Experience during the war has shown the necessity of much more accurate information on this subject than has heretofore been available.

BANKING OPPORTUNITIES IN SOUTH AMERICA

Secretary Redfield of the Department of Commerce has published No. 106 of the "Special Agents' Series," on *Banking Opportunities in South America*, by William H. Lough, special agent of the department.

The report is the result of an extensive trip in South America, and furnishes a review of existing conditions with reference to American investments and the underwriting and selling of securities, the prevailing banking institutions and establishments now operating in South America, and the foreign exchange situation with reference to South American markets. There is also a chapter with reference to banking practice, expenses, and profits in the South American field, and finally a chapter outlining what are supposed to be the requirements to be met by the United States in extending its operations in South America.

Some of the material is of familiar character, especially that relating to the historical side of banking in South America. The principal interest in the report is found in its survey of opportunities for future profit, of the conditions under which banks must develop, and in its outline of the steps that must be taken by the United States in order to develop the South American field. In speaking of the features which differentiate this South American field from that of the United States, Mr. Lough says:

> The chief differences that directly affect banking operations are the following: (1) comparative absence of banking regulation on the part of governments or associations; (2) influence of foreign colonies, investments, and sentiments; (3) social character of business relations; (4) increased moral hazard; (5) lack of highly developed economic organization; (6) relatively high and stable rates of interest; and (7) in some countries fluctuating currencies.

There is little control of the banks and little co-operation among them in most South American countries, the personal side of banking being largely emphasized. In a general way everything is on a higher and larger scale than in the United States and Europe. Losses and defalcations are greater, interest rates higher, business opportunities broader and at the same time more hazardous, than the general run of those to be found in more highly developed countries. As to the course of exchange, there has been some improvement because of the fact that in certain countries a relatively stable currency has been introduced. The two nations having the best currency today are Argentina and Uruguay, while five others have reduced the fluctuations in monetary values to very narrow limits. In other countries the exchange quotations are extremely irregular and uncertain. Mr. Lough's review of the classes of business in South America is of considerable interest and is as follows:

> First. The foreign banks in South America usually start by devoting a large proportion of their energy and capital to operations in exchange.

Second. In this connection they purchase and make advances against commercial bills drawn on importers in the countries where they are doing business.

Third. At the same time the home office in London, Hamburg, or Berlin is probably developing a business in acceptances which involves comparatively little direct expense and allows considerable profits.

Fourth. All South American banks are called upon to handle collection of drafts and sometimes to take care of ordinary mercantile transactions, both on a commission basis.

Fifth. An activity which may be of some importance from the beginning consists of underwriting and selling securities.

Sixth. As quickly as possible the foreign banks build up a local account current and loan and discount business.

Seventh. Some of the banks, especially the German banks, have participations in syndicates and in industrial enterprises.

Eighth. In some branches they receive money and securities for safe-keeping or rent safe-deposit boxes.

Ninth. Many banks have savings and mortgage-loan departments.

The final chapter of the monograph, that which deals with the steps that must be taken by the United States in developing banking connections in South America, will probably arouse considerable difference of opinion. Mr. Lough takes the view that the Federal Reserve act has bestowed a monopoly of foreign banking upon New York City, and perhaps upon a very small number of institutions in that place. This is an interpretation in which very few persons will agree with him. Because of it, however, he recommends that there be adopted an amendment to the Federal Reserve act permitting national banks in the United States to join together for the establishment of common branches in foreign countries. The idea is an old one, and was embodied in the Aldrich or Monetary Commission bill. When the time came in 1913 for banking legislation, the present provision of the Federal Reserve act was considered best adapted to the situation. Mr. Lough thinks that at the present time there is an exceptionally favorable opportunity for developing operations of foreign banks in South America. The most promising field is believed to be the west coast, inasmuch as little has been done there by foreign capital, while the development general of the west coast in the next few years will be greatly advanced on account of the opening of the Panama Canal. Moreover, American investments and trade interests on the west coast are not overshadowed by European operations, as they are on the east coast.